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EXAMINER

RAY, GOPAL C

ART UNIT	PAPER NUMBER
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2111

DATE MAILED: 04/30/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/967,027

Applicant(s)

PECONE, VICTOR KEY

Examiner

Gopal C. Ray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2001.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 1-4 and 6-10 is/are allowed.  
6) ☒ Claim(s) 5, 11, 21 and 22 is/are rejected.  
7) ☒ Claim(s) 12-20, 23 and 24 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

1. Claims 1-24 are presented for examination.
2. The drawings filed on 9/28/01 are objected to by the USPTO draftsman. See PTO-948 for objections to the drawings. The drawings are acceptable for examination purposes only. Formal drawings will be required when the application is allowed. Direct any inquiries concerning drawing review by the USPTO draftsman to the Drawing Review Branch at (703) 305-8404.
3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it exceeds 150 words limit. Applicant should reduce the number of words in the abstract of the invention to 150 words. Furthermore, it would be appropriate to change the word "disclosed" to --described--. Applicant is reminded that the words "means" or "said" should not be used in the new abstract of the disclosure.

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4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

5. Claim 5 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner notes the following ambiguities. However, all claims should be revised carefully to eliminate all grammatical errors and antecedent basis problems.

As per claim 5, the claim is vague and indefinite. The claim recites "third and fourth data buses". However, there is no interconnectivity, it is unclear as to how the buses are connected to the rest of the claimed features and where the buses receive data from and transmit to.

6. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 11 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6,272,533 issued to Browne in view of US Patent 5,530,842 issued to Abraham et al.

As per claim 11, the reference of Browne teaches "providing a first channel interface module having a first switched path and a second switched path" in Fig. 7, paths between switch 206 and SCSI controllers, elements 108c-d; "connecting said first switched path to a first controller memory module using a passive backplane and said second switched path to a second controller memory module using said passive backplane" in Fig. 7, SCSI controllers, elements 108c-d; "enabling said first switched path; and "disabling said second switched path" in col. 10, lines 53-55.

The reference of Browne fails to expressly teach use of a passive backplane. However, the above feature was well known to one of ordinary skill in the art at the time the invention was made as evidenced by Abraham et al. The reference of Abraham et al. teaches the feature in col. 32, lines 23-35. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a passive backplane in the system of Browne because the concept of "backplane bus" is well established in the computer and communication art which can be shared by a number of users. The reference of Abraham et al. teaches the motivation in col. 1, lines 44-50.

As per claim 21, the reference of Browne teaches "at least a first channel interface module having a first switched path and a second switched path" in Fig. 7, paths between switch 206 and SCSI controllers, elements 108c-d; "a first controller memory module connected to said first switched path using said passive backplane and a second controller memory module disabled from said second switched path" in Fig. 7, SCSI controllers, elements 108c-d and col. 10, lines 53-55.

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The reference of Browne fails to expressly teach use of a passive backplane. However, the above feature was well known to one of ordinary skill in the art at the time the invention was made as evidenced by Abraham et al. The reference of Abraham et al. teaches the feature in col. 32, lines 23-35. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use passive backplane because the concept of "backplane bus" is well established in the computer and communication art which can be shared by a number of users. The reference of Abraham et al. teaches the motivation in col. 1, lines 44-50

8. Claim 22 is rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6,272,533 issued to Browne in view of US Patent 5,530,842 issued to Abraham et al. as applied in claim 21 above, and further in view of US Patent 6,243,829 issued to Chan.

As per claim 22, the claim is rejected for the same reasons as discussed in the rejection of claim 21 above with the exception of "disabling said first switched path and enabling said second switched path in case said first controller fails".

However, the above feature was well known to one of ordinary skill in the art at the time the invention was made as evidenced by Chan. The reference of Chan teaches the feature in col. 4, lines 16-19. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the above feature of Chan because it would make the system of Browne in view of Abraham et al. more reliable and fault-tolerant.

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9. Claims 1-4 and 6-10 are allowable over the prior art on record. Independent claim 1 is allowable over the prior art on record because the claim recites additional limitations such as "at least first and second channel interface modules, connected to a passive backplane and adapted to be connected to a host computer and the at least one storage device, that are operational to send and receive storage data to and from the host computer and the at least one storage device and that are operational to selectively transfer the storage data to one or more plurality of data buses" in combination with other claimed elements which the prior art on record does not teach or fairly suggests. Dependent claims 2-4 and 6-10 further limit the subject matter of parent claim 1. Claims 12-20, 23 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 12-20, 23 and 24 are allowable over the prior art on record because they recite additional features in combination with the features in the respective parent claims which the prior art on record does not teach or fairly suggests. Claim 5 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action including all of the limitations of parent claim 1. The claim is allowable at least for allowability of parent claim 1.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is urged to consider the references. However, the references should be evaluated by what they suggest to one versed in the art, rather

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than by their specific disclosure. . Furthermore, applicant is reminded of the duty to disclose as set forth in 37 CFR § 1.56.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gopal C. Ray whose telephone number is (703) 305-9647. The examiner can normally be reached on Monday - Friday from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (703) 305-4815. The new fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [[mark.rinehart@uspto.gov](mailto:mark.rinehart@uspto.gov)].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2100 receptionist whose telephone number is (703) 305-3900.

*Gopal C. Ray*  
GOPAL C. RAY  
PRIMARY EXAMINER  
GROUP 2800